Commercial Space **Transportation** Safety Approval

Safety Approval Number: SA 11-002

Zero Gravity Corporation

is issued a safety approval, subject to the provisions of 51 USC Subtitle V, Ch. 509, and the orders, rules, and regulations issued under it.

This safety approval is issued to the Zero Gravity Corporation for its ability to provide a flight environment capable of replicating the reduced gravity levels within the following envelope:

0.00 g +/- 0.05 g for 17 continuous seconds,

0.16 g +/- 0.05 g for 20 continuous seconds; and
0.38 g +/- 0.05 g for 20 continuous seconds.

This safety approval is granted subject to the terms, conditions, and limitations set forth in safety approval order A and any subsequent orders issued by the Office of Commercial Space Transportation.

The holder of this safety approval must at all times comply with the regulations prescribed by the Office of Commercial Space Transportation relating to this Safety Approval.



US Department of Transportation Federal Aviation Administration

Issued On: April 20, 2011

Effective On: April 20, 2011

Manager, Licensing & Evaluation Division

800 Independence Ave., S.W. Washington, D.C. 20591

OFFICE OF COMMERCIAL SPACE TRANSPORTATION SAFETY APPROVAL ORDER REGARDING

Zero Gravity Corporation: Reduced Gravity Parabolic Flight Maneuvers

SAFETY APPROVAL NO. SA 11-002 ISSUED TO

ZERO GRAVITY CORPORATION

- 1. Authority: This Order is issued to the Zero Gravity Corporation under 51 U.S.C. Subtitle V, chapter 509.
- 2. <u>Purpose</u>: This Order prescribes conditions to the Safety Approval and certain requirements applicable to the approved safety element.
- 3. Scope: The FAA finds that Zero Gravity Corporation can replicate three separate reduced gravity parabolic flight profiles of:
 - 1) 0.00 g +/- 0.05 g for 17 continuous seconds,
 - 2) 0.16 g +/- 0.05 g for 20 continuous seconds; and
 - 3) 0.38 g +/- 0.05 g for 20 continuous seconds
- 4. Maintenance: Zero Gravity Corporation must follow the maintenance procedures for the acceleration display and recording system, including the RDA-56 digital accelerometer and the Parabolic Aircraft Acceleration Measurement System, according to the maintenance procedures as represented in its application.
- 5. <u>Calibration</u>: Zero Gravity Corporation must calibrate all accelerometers and recording devices, as represented in its application.
- 6. Reporting: Zero Gravity Corporation must notify the Office of Commercial Space Transportation of any anomalies affecting the accuracy of the Parabolic Aircraft Acceleration Measurement System.
- 7. <u>Crew Qualification and Training</u>: Zero Gravity Corporation may offer the reduced gravity parabolic flight profiles to a prospective launch operator to meet the applicable

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components of the crew qualification and training requirements of 14 CFR § 460.5.

- 8. <u>Compliance</u>: Issuance of a safety approval does not relieve Zero Gravity Corporation of its obligation to comply with any laws or regulations applicable to its operation.
- 9. Safety Approval Term: Safety Approval No. SA 11-002 expires in 5 years from the effective date of the Safety Approval, or upon ceasing to carry out its activities in accordance with the representations in its application.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

By:

Kenneth Wong, Manager

Licensing & Evaluation Division

Issued:

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